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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,765	01/12/2004	John L. Schantz	200309946-1	9615

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INTELLECTUAL PROPERTY ADMINISTRATION		
FORT COLLINS, CO 80527-2400		

EXAMINER
TEDOM, CLEMENT N

ART UNIT	PAPER NUMBER
2619	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/755,765

Applicant(s)

SCHANTZ, JOHN L.

Examiner

Clement N. Tedom

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Amendment filed on 09/22/07 has been entered.

Claims 1-14, and 20-25 are cancelled.

Claims 15-19 are pending.

Claims 15-19 are still rejected.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delaney et al Patent No 6795546, hereinafter (Delaney), further in view of Grewal et al, Patent No 5592672, (hereinafter Grewal)

With respect to claim 15

Delaney teaches In a multi-CPU receiving node of a network (See figure 4 and column5, line10-18), a method for routing a SCCP (Signaling Connection Control Part) message to a specific CPU in the multi-CPU receiving node, comprising (See column 3,line 55-61,where message can be a SCCP message):

applying a mathematical function to information received in the SCCP message to obtain a result, the information including a first value obtained in a first field of the SCCP message (See fig 7,where after message is received on step ST1, a first field and a second field information are computed on step ST4 and ST5, as well as equation 1 on column 8, applied to information received)

Delaney further teaches the mathematical function further ensuring that messages belonging to a given SCCP message stream are routed to a single CPU of the multi-CPU receiving node; and employing the result to route the SCCP message to the specific CPU. (See fig 7, step ST6 where offset value of message from SCCP are used to select processor, and step ST8, where message is routed to selected processor).

Delaney does not teach the mathematical function ensuring that a load on any CPU in the multi-CPU receiving node differs by no more than 25% when sampled over a continuous 24-hour period from a load on any other CPU in the multi-CPU receiving node that is designated for load sharing SCCP message processing,

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Grewal, which is in the same field of endeavor, (System for load balancing between message processor), disclose a message distribution process which based on deterministic rules is capable of equally distributing load across multiple processor in a network environment (See column 4, lines 55-65, as well as column 5, lines 1-45, where deterministic rule/function for load distribution is explained); which means that the multiple processor share the same load as they are distributed equally, meaning that none of the processor's load differ by more than 25%.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to evenly distribute load across multiple processor in order to minimize traffic congestion from multiple sources at multiple outgoing processor where the traffic arrive randomly (See column 1, lines 10-15).

Grewal further teaches equally dividing load across processor for a period of time (see column 4, lines 55-65, as well as column 5, lines 1-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to sample over a 24hours period since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 16 and 17

Delaney as modified by Grewal teaches the limitation of claim 15 for the reason above Delaney further teaches the second value represents an OPC (Originating Point Code) value, and first value represents a Signaling Link selection (SLS) (See column 4, lines 10-14, where message comprise a SLS value and a OPC value)

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With respect to claim 18 and 19

Delaney teaches the limitation of claim 15 for the reason above.

Delaney does not teach the mathematical function ensuring that a load on any CPU in the multi-CPU receiving node differs neither by no more than 5% nor 2% when sampled over a continuous 24-hour period from a load on any other CPU in the multi-CPU receiving node that is designated for load sharing SCCP message processing, Grewal, which is in the same field of endeavor, (System for load balancing between message processor), disclose a message distribution process which based on deterministic rules is capable of equally distributing load across multiple processor in a network environment (See column 4, lines 55-65); which means that the multiple processor share the same load as they are distributed equally, meaning that none of the processor's load differ by neither more than 5% nor 2%.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to evenly distribute load across multiple processor in order to minimize traffic congestion from multiple sources at multiple outgoing processor where the traffic arrive randomly (See column 1, lines 10-15)

Grewal further teaches equally dividing load across processor for a long period of time.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to sample over a 24hours period since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

4. Applicant's arguments filed 09/22/07 have been fully considered but they are not persuasive.

With regard to claim 15, 18 and 19, Applicant argues that Grewal does not disclose a mathematical function directed to load distribution at no more than 25 %, 5% and 2% over a 24hour period.

Examiner respectfully disagrees.

Grewal disclose in column 5, lines 1-50, disclose computation performed for load distribution following deterministic rules, with the load being equally distributed among the processors; which means that the multiple processor share the same load as they are distributed equally, meaning that none of the processor's load differ by neither more than 5% nor 2%.

Grewal also discloses that the distribution process takes place over a period of time (see column 4, lines 55-65, as well as column 5, lines 1-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to sample over a 24hours period since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement N. Tedom whose telephone number is (571) 270-1827. The examiner can normally be reached on Monday-Friday, 7:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Clement Tedom

Patent Examiner

10/11/07



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